

automatically enabling, by the controller, maintaining viability of the tissue.

2. The method as in claim 1 wherein the tissue growth medium mixture further comprises:

indicators, support materials, gel, and basal medium.

3. The method as in claim 1 wherein the tissue growth medium mixture further comprises:

indicators, support materials, carbomer, and basal media.

4. The method as in claim 1 maintaining the viability comprises:

evacuating wastes from metabolism of the tissue.

5. A system for automatically growing tissue, the tissue having tissue characteristics, the system comprising:

a controller executing instructions including:

automatically selecting, based on the tissue characteristics, cells associated with the tissue;

automatically enabling expanding the cells;

automatically enabling creating at least one protein;

automatically enabling creating at least one tissue bio-ink including the expanded cells and the at least one protein;

automatically enabling creating at least one tissue growth medium mixture including the at least one protein;

automatically enabling printing the at least one tissue bio-ink in the at least one tissue growth medium mixture; and

automatically enabling growing the tissue from the printed at least one tissue bio-ink in the at least one tissue growth medium mixture.

6. The system as in claim 5 wherein the controller further executes instructions comprising:

automatically enabling creating at least one printable protein bio-ink.

7. The system as in claim 6 wherein the controller further executes instructions comprising:

automatically enabling creating the at least one protein based on the at least one printable protein bio-ink;

8. The system as in claim 6 wherein the controller further executes instructions comprising:

automatically enabling maintaining viability of the tissue.

9. The system as in claim 8 maintaining the viability comprises:

evacuating wastes from metabolism of the tissue.

10. The system as in claim 5 wherein the tissue growth medium mixture further comprises:

indicators, support materials, gel, and basal medium.

11. The system as in claim 5 wherein the tissue growth medium mixture further comprises:

indicators, support materials, carbomer, and basal media.

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